



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,767	09/15/2003	Chikashi Niimi	044499-0178	7273
22428	7590	10/05/2004	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			NGUYEN, VINCENT Q	
			ART UNIT	PAPER NUMBER
			2858	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/661,767	Applicant(s) NIIMI ET AL.	
	Examiner Vincent Q Nguyen	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/03/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it contains legal phraseology "comprises" (e.g. line 1). Correction is required. See MPEP § 608.01(b).

Objection

3. Claim 8, lines 1-2, the claim recite: "A method for manufacturing a proximity sensor, the method enabling the manufacture of proximity sensors of different outer diameters by using." The examiner is confusing whether the claim is an apparatus or a

method claim since in the body of the claim (Lines 3-12), the limitations recited in the claim are elements of an apparatus (No steps of manufacturing involve).

Appropriate correction and/or explanation is required.

For the purpose of examination, examiner assumes the claim is an apparatus claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Dickmeyer et al. (5,998,988).

Regarding claim 8, Dickmeyer et al. discloses a connector comprising a terminal assembly (figure 1) having a pin holder for holding a plug-adaptable conductive terminal (12) and a cylindrical holding member (10) having openings at both ends so as to enable the conductive terminal assembly to be inserted therein from one of the openings and which also has a joint part inside (Figure 1A) so as to enable the conductive terminal assembly to be positioned to the holding member, the conductive terminal assembly (12) and the holding member being integrated via the joint part (46); plural kinds of outer shell cases of different outer diameters (14, 46) (figures 4-5) which are desired so as to enable the holding member to be fixed from a rear-end side of the

plural kinds of outer shell cases and the conductive terminal assembly (12) to be inserted from a front-end side of the plural kinds of outer shell cases so as to be connected with the holding member (10).

Allowable Subject Matter

1. Claims 1-7 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or suggest a proximity sensor having an oscillation circuit using the coil as a resonant circuit element; a conductive terminal assembly which includes a plug-adaptable conductive terminal electrically connected with the circuit assembly and a pin holder for holding the conductive terminal, and which is sized to be able to be inserted from the front-end side of the outer shell case; and a cylindrical holding member which has openings at both ends so as to enable the conductive terminal assembly to be inserted, which also has a joint part inside to enable the conductive terminal assembly to be positioned thereto, and which is fixed from the rear-end side of the outer shell case, as recited in the independent claim 1;

a method for manufacturing a proximity sensor having the step of preparing a yet-to-be completed product including a circuit assembly which incorporates an oscillation circuit using the coil as a resonant circuit element; and a conductive terminal assembly including a plug-adaptable conductive terminal; a cylindrical holding member which has openings at both ends so as to enable the conductive terminal assembly to be inserted and which also has a joint part inside to enable the conductive terminal

assembly to be positioned to the holding member, and a cylindrical outer shell case for integrally accommodating the yet-to-be-completed product and the holding member, as recited in the independent claims 4-7; and in combination of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

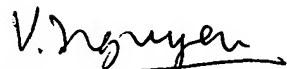
Patent No. 4,922,197 (Juds et al.) discloses a high resolution proximity detector having an integrally formed housing having a generally tubular elongate probe defining a sealed interior cavity receiving an annular permanent magnet at the sensing end, a transducer concentrically disposed with the magnet to detect distortions of the magnetic field effected by passage of the target and means in-circuit with the transducer which generates a usable output signals as a function of sensed magnet field distortion.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Q Nguyen whose telephone number is (571) 272-2234. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (571) 272-2233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


September 30, 2004

Vincent Q Nguyen
Patent Examiner
Art Unit 2858